

- 7 -

CLAIMS

Sub D17
1. An improved bone screw for use in orthopaedic surgery, in particular with external fracture fixation devices, of the type which comprises a head (3), a shank (4), and a threaded portion (5) tapering towards a tip (2) at the opposite end from the head (3), wherein said threaded portion (5) has at least one constant pitch section comprising threads (9) with an acute angle or cusp-like triangular profile in cross-section, characterised in that said threads (9) are separated from each other by a shaped bottom land having a concave profile (10) defined by two countersloping planes.

2. A bone screw according to Claim 1, characterised in that said shaped bottom land has in cross-section an obtuse angle (β) of conical convergence towards the longitudinal axis of the screw.

3. A bone screw according to Claim 2, characterised in that said obtuse angle (β) is an angle of at least 150° .

4. A bone screw according to Claim 1, characterised in that said cusp forms an angle in the 15° to 30° range.

5. A bone screw according to Claim 1, characterised in that said constant pitch is of 1.25mm.

6. A bone screw according to Claim 1, characterised in that the facing walls of adjacent threads have in cross-section an acute angle (α) of conical convergence towards the longitudinal axis of the screw.

7. A bone screw according to Claim 6, characterised in that said acute angle (α) is an angle in the 15° to 30° range.

8. A bone screw according to Claim 1, characterised in that the threaded portion (5) accounts for about one third of the screw length.

9. A bone screw according to Claim 1, characterised in that the height of the thread is three fifths the pitch length.

10. A bone screw according to Claim 9, characterised in that said height is 0.75mm.

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